JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A Study on Secondary School Teachers' Attitude Towards Technology Assisted Learning Programme (TALP) in relation to few Biographical Variables

[1] Dr. VANISHREE KOPPAD

[1] Assistant Professor
[1] Department of Education
[1] Bangalore University, Jnana Bharathi Campus, Bengaluru-560056. Karnataka, India.

Abstract: The purpose of this investigation is to examine the Science Achievement of 9th Standard Students in relation to attitude towards TALP (Technology Assisted Learning Programme) on Science Learning. The present research was followed by a descriptive survey method. The sample of 100 9th standard students from ten government schools situated at Bengaluru South Districts selected as sample. Science Achievement of students was taken from the office records of their respective schools and 'Attitude Towards TALP' (Technology Assisted Learning Programme) on Science Learning developed by Dr. Vanishree (2018) was used to assess the attitude towards Technology Assisted Learning Programme on science learning of the 9th standard students. The collected data was analyzed through correlation and independent 't' test and in all cases the level of significance was fixed at 0.05 and 0.01 level of confidence. The correlation result shows positive significant relationship between attitude towards TALP on science learning and science achievement of 9th standard students. The same has shown from 't' test analysis that there was a significant difference in the Science Achievement of 9th standard boys and girls and also shows that, there was a significant difference in the Science Achievement of 9th standard students having varied attitude levels towards TALP on science learning. This may be due to lack of encouraging students involvement. Involve students in the process of selecting and implementing technology-assisted learning programs. This helps build ownership and enthusiasm. Make learning interactive and engaging by incorporating game elements such as points, rewards, and competition.

Index Terms – Attitude, Technology Assisted Learning Programme (TALP), Secondary School, Teachers.

INTRODUCTION

Technology plays an important role in teacher education. Technology provides teachers with a vast amount of information and educational resources at their fingertips, making it easier to plan lessons and assess student learning. Due to the extensive use of technology in every walk of life, the educational institutes are also supposed to prepare their students to be technology literate (Kalanada, 2005). Technology offers innovative teaching methods, such as online learning and virtual reality, which can help engage students and make education more interactive and dynamic. The value system and the beliefs are the two promising factors which are found to determine the attitude of an individual towards technology (Gardner, Dukes, & Discenza, 1993).

Technology can be used to personalize learning for each student, allowing teachers to better understand their strengths and weaknesses and provide targeted support. Technology can be used to connect teachers and students, creating opportunities for collaboration and peer-to-peer learning. Technology can greatly enhance teacher education by providing new and improved ways of teaching and learning, ultimately leading to better educational outcomes for students. The cognitive style of students (field dependants/ field independents) is found to be another factor influencing their attitude towards the use of technology in education (Abouserie, & Moss, 1992). The department has mapped the available digital resources in mathematics and science subjects to the

state curriculum under various programmes such as Karnataka Open Educational Resources, EDUSAT, Radio, Tele-Education, Amrita O'Labs, Agasthya Foundation Science Experiments and many more. In general and despite thousands of studies, the impact of TALP utilization on student achievement remains difficult to measure and open to much reasonable debate. It is believed that specific uses of TALP can have positive effects on student achievement when TALPs are used appropriately to complement a teacher's existing pedagogical philosophies.

The technology-supported learning program at the state government primary, high school and pre university colleges is scheduled to be implemented for a period of 5 years in 2016-17. The IT@Schools in Karnataka project has been implemented as part of the program. Teachers of primary, high school and PU colleges can use technology (ICT) skills to facilitate their learning, as well as to reinforce their professional attitudes and enable them to create the e-resources required for their teaching and learning processes. In 2016-17, the DSERT partnered with the Azeem Prem Jee Foundation (APF) to develop ICT. It has created task guides and 143 videos in Kannada utilizing some resource teachers based on the 'ICT teacher curriculum' prepared by CIET. These resources were utilized for Induction-1 training during 2016-17. Then from 2017-18, the state has been conducting these trainings with the encouragement and guidance of CIET-NCERT, New Delhi.

Attitude refers to a person's overall evaluation or feeling about something, such as a particular situation, person, or object. Attitudes are learned and developed through personal experiences and interactions with others. For teachers, having a positive attitude towards their work, students, and the learning process is crucial in creating a supportive and engaging learning environment. Some of the reasons why attitude is important for teachers include student motivation, setting a tone for the classroom, building relationship with students and professional growth. Teachers with a positive attitude are more likely to continue learning and growing professionally, which can have a positive impact on their teaching practices and students' learning outcomes. Overall, having a positive attitude is essential for teachers to create a supportive and effective learning environment for their students. In order for technology-assisted learning programs to be effective, it is important for teachers to have a positive attitude towards technology and be willing to integrate it into their teaching practices. This can be achieved through providing teachers with adequate training, resources, and support to help them effectively implement technology in the classroom.

The attitude of teachers towards Technology-Assisted Learning Programs (TALP) can vary greatly depending on a number of factors, such as prior experience with technology, comfort level while using technology in the classroom, and perceptions of the effectiveness of these programs in promoting student learning. Some teachers may view TALP as a valuable tool for engaging students and enhancing learning, while others may see it as a threat to traditional teaching methods and be resistant to change. To develop a positive attitude towards TALP among teachers, it is important to provide comprehensive training and support, including hands-on workshops, one-on-one coaching, and access to resources and tutorials. Additionally, involving teachers in the implementation and evaluation process can help them see the value of TALP and become advocates for its use. It's also important to highlight the benefits of TALP, such as increased student engagement, personalized learning, and access to educational resources. By demonstrating the value and benefits of TALP in the classroom, teachers may become more open to incorporating it into their teaching practice.

NEED AND IMPORTANCE OF THE STUDY

The attitudes of teachers towards technology assisted learning programs can vary. Attitudes also depend on individual learning styles, prior experiences with technology, and access to resources. Factors such as the design and implementation of the technology-assisted program and the support provided to students can also impact their attitudes. Ultimately, the success of technology-assisted learning programs depends on how well they meet the needs and expectations of students being used.

Teachers' attitudes towards technology-assisted learning programs can play a significant role in determining the effectiveness of the program. Teachers who are comfortable with technology are more likely to embrace technology-assisted learning programs and integrate them into their teaching practices. Teachers who are comfortable with technology are more likely to embrace technology-assisted learning programs and integrate them into their teaching practices. Teachers who see the value in technology-assisted learning programs, such as improved student engagement and outcomes, are more likely to be supportive of the programs. Teachers who receive adequate training and professional development opportunities are more likely to feel confident using technology in the classroom. Teachers who believe that technology has a positive impact on learning and teaching are more likely to support technology-assisted learning programs.

STATEMENT OF THE PROBLEM

This investigation is to know the secondary school teachers' attitude towards TALP in Bengaluru South District. The topic identified for the current investigation is: "A Study on Secondary School Teachers' Attitude towards Technology Assisted Learning Programme (TALP) in relation to few biographical variables."

OBJECTIVES OF THE STUDY

1. To find out the difference in the teachers' attitude towards Technology Assisted Learning Programme with regard to sex.
2. To find out the difference in the teachers' attitude towards Technology Assisted Learning Programme with regard to age.
3. To find out the difference in the teachers' attitude towards Technology Assisted Learning Programme with regard to marital status.
4. To find out the difference in the teachers' attitude towards Technology Assisted Learning Programme with regard to teaching experience.

RESEARCH HYPOTHESES

The following hypotheses guided the study:

1. There is no significant difference in the secondary school male and female teachers' Attitude towards Technology Assisted Learning Programme (TALP).
2. There is no significant difference in the secondary school younger and older teachers' attitude towards Technology Assisted Learning Programme (TALP).
3. There is no significant difference in the secondary school married and unmarried teachers' Attitude towards Technology Assisted Learning Programme (TALP).
4. There is no significant difference in the less and more teaching experienced secondary school teachers' Attitude towards Technology Assisted Learning Programme (TALP).

METHODOLOGY

This investigation is to know the secondary school teachers' attitude towards Technology Assisted Learning Programme (TALP) in teaching-learning process with regard to sex, age, martial status and teaching experience of teachers. The present research was followed by a descriptive survey method. The sample of 60 secondary school teachers from ten government schools situated at Bengaluru South District selected as sample. 'Attitude towards Technology Assisted Learning Programme (TALP)' developed by the

researcher was used to assess the attitude of teachers towards technology assisted learning programme. The collected data was analyzed by independent 't' test and in all cases the level of significance was fixed at 0.05 and 0.01 level of confidence.

ANALYSIS AND INTERPRETATION OF DATA

Table 1: Showing independent 't' test results related to secondary school male and female teachers' Attitude towards Technology Assisted Learning Programme (TALP).

Sex	No.	Mean Scores	Standard Deviation	't' value	Level of Sig.
Male	23	114.608	48.709	1.73	NS
Female	37	135.270	38.222		

NS Not Significant

The table-1 shows the number, mean scores, standard deviation, 't' value and level of significance of secondary school male female teachers' attitude towards TALP. Also the table shows that the obtained 't' value 1.73 which is less than the table value of 2.00 (df=58) at 0.05 level and thus it is not significant even at 0.05 level. Hence, the null hypothesis is **accepted** that is, "there is no significant difference in the secondary school male and female teachers' Attitude towards Technology Assisted Learning Programme." It concludes that, both male and female secondary school teachers had similar attitude towards TALP. The comparison of secondary school male and female teachers' attitude towards TALP are graphically presented in Fig.1.

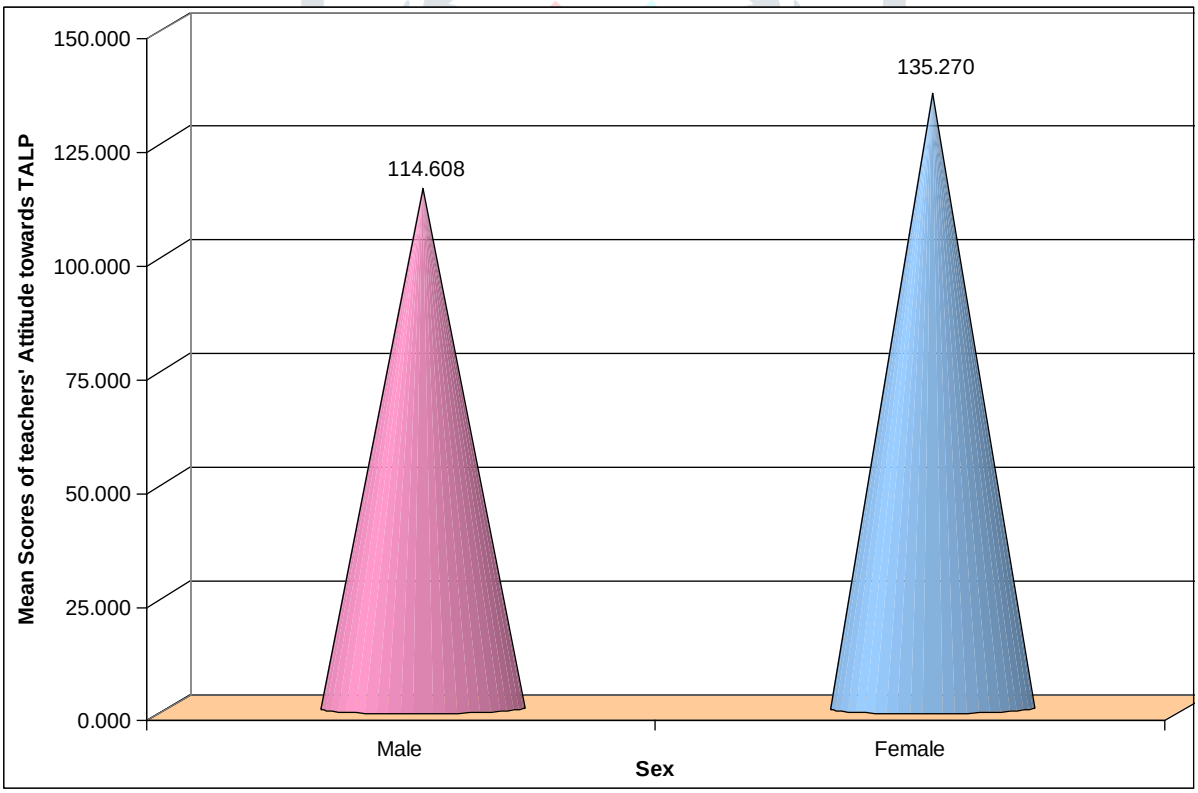

Fig.1: Bar graph shows the comparison of secondary school male and female teachers' attitude towards TALP.

Table 2: Showing independent 't' test results related to secondary school younger and older teachers' Attitude towards Technology Assisted Learning Programme (TALP).

Age	No.	Mean Scores	Standard Deviation	't' value	Level of Sig.
Younger	30	155.233	41.814	6.49	**
Older	30	99.466	21.569		

** Significant at 0.01 level (Table Value=2.66)

The above table-2 shows the number, mean scores, standard deviation, 't' value and level of significance of secondary school younger and older teachers' Attitude towards TALP. Also the table shows that the obtained 't' value 6.49 which is higher than the table value of 2.66 (df=58) at 0.01 level and thus it is significant at 0.01 level. Hence, the null hypothesis is **rejected** and an alternative hypothesis has been formulated that "there is a significant difference in the secondary school younger and older teachers' Attitude towards Technology Assisted Learning Programme." The mean scores of secondary school younger teachers' attitude towards TALP (M=155.233) had more when compared to older teachers (M=99.466). It concludes that younger teachers' attitude towards technology assisted learning programme had higher than older teachers. The comparison of secondary school younger and older teachers' attitude towards TALP are graphically presented in Fig.2.

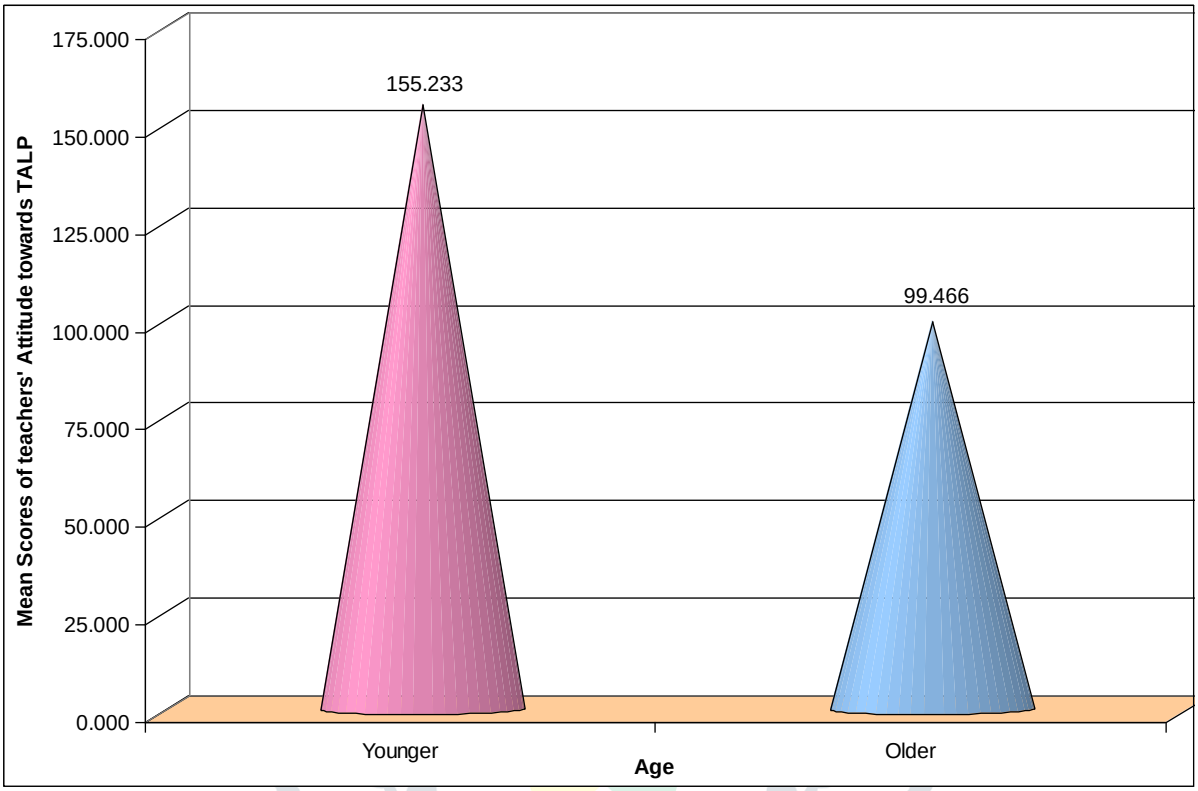

Fig.2: Bar graph shows comparison of secondary school younger and older teachers' attitude towards TALP.

Table 3: Showing independent 't' test results related to secondary school married and unmarried teachers' Attitude towards Technology Assisted Learning Programme (TALP).

Marital Status	**No.**	**Mean Scores**	**Standard Deviation**	**'t' value**	**Level of Sig.**
Married	50	115.600	37.267	10.75	**
Unmarried	10	186.100	12.350		

** Significant at 0.01 level (Table Value=2.66)

The above table-3 illustrates the number, mean scores, standard deviation, 't' value and level of significance of secondary school married and unmarried teachers' Attitude towards TALP. Also the table shows that the obtained 't' value 10.75 which is higher than the table value of 2.66 (df=58) at 0.01 level and thus it is significant at 0.01 level. Hence, the null hypothesis is **rejected** and an alternative hypothesis has been formulated that "there is a significant difference in the secondary school married and unmarried teachers' Attitude towards Technology Assisted Learning Programme." The mean scores of secondary school unmarried teachers' attitude towards TALP (M=186.100) had more when compared to married teachers (M=115.600). It concludes that secondary school unmarried teachers' attitude towards technology assisted learning programme had higher when compared to married teachers. The comparison of secondary school married and unmarried teachers' attitude towards TALP are graphically presented in Fig.3.

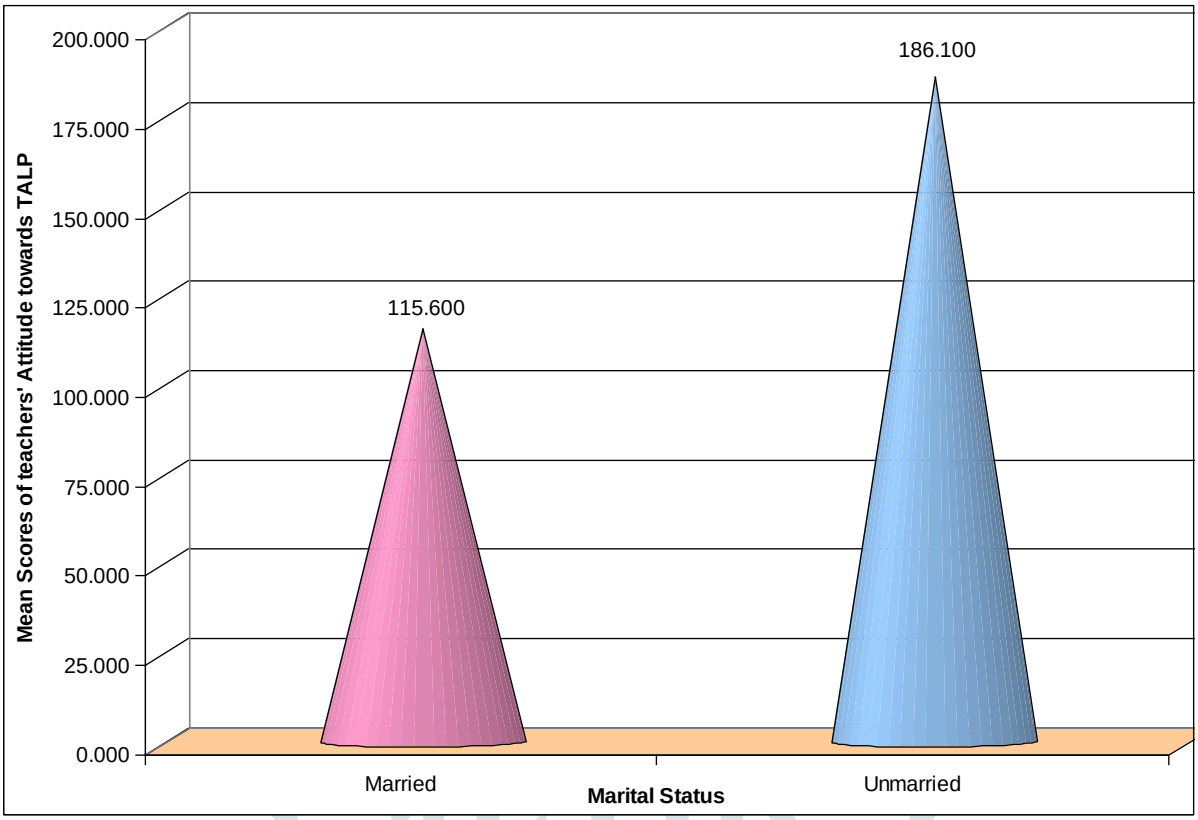

Fig.3: Bar graph shows the comparison of secondary school married and unmarried teachers' attitude towards TALP.

Table 4: Showing independent 't' test results related to secondary school less and more teaching experienced teachers' Attitude towards Technology Assisted Learning Programme (TALP).

Teaching Experience	**No.**	**Mean Scores**	**Standard Deviation**	**'t' value**	**Level of Sig.**
Less	42	103.952	27.221	14.21	**
More	18	181.944	14.992		

** Significant at 0.01 level (Table Value=2.66)

The above table-4 explains the number, mean scores, standard deviation, 't' value and level of significance of secondary school less and more teaching experienced teachers' Attitude towards TALP. Also the table shows that the obtained 't' value 14.21 which is higher than the table value of 2.66 (df=58) at 0.01 level and thus it is significant at 0.01 level. Hence, the null hypothesis is **rejected** and an alternative hypothesis has been formulated that "there is a significant difference in the secondary school less and more teaching experienced teachers' Attitude towards Technology Assisted Learning Programme." The mean scores of secondary school more teaching experienced teachers' attitude towards TALP (M=181.944) had more when compared to less teaching experienced teachers (M=103.952). It concludes that secondary school more teaching experienced teachers' attitude towards technology assisted learning programme had higher when compared to less teaching experienced teachers. The comparison of secondary school less and more teaching experienced teachers' attitude towards TALP are graphically presented in Fig.4.

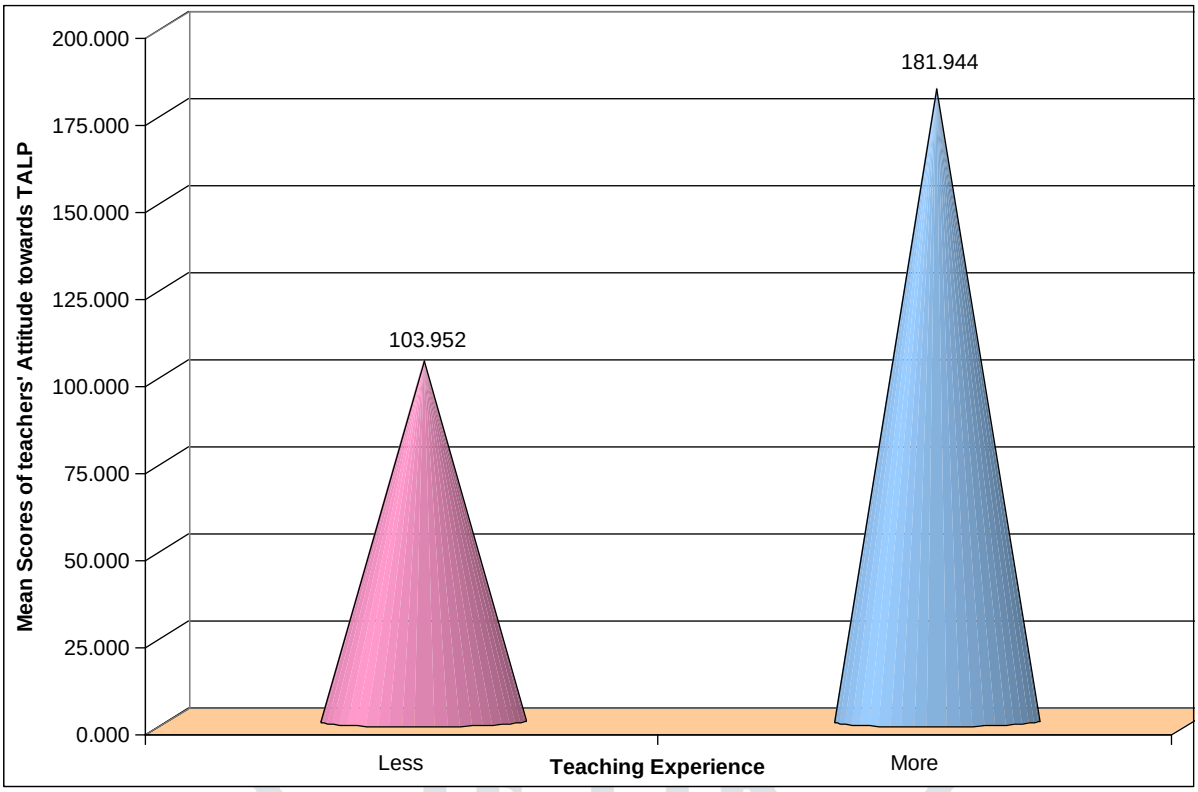

Fig.4: Bar shows comparison of secondary school less and more teaching experienced teachers' attitude towards TALP.

RESULTS

1. There was no significant difference in the secondary school male and female teachers' Attitude towards Technology Assisted Learning Programme.
2. There was a significant difference in the secondary school younger and older teachers' Attitude towards Technology Assisted Learning Programme.
3. There was a significant difference in the secondary school married and unmarried teachers' Attitude towards Technology Assisted Learning Programme.
4. There was a significant difference in the less and more teaching experienced secondary school teachers' Attitude towards Technology Assisted Learning Programme

CONCLUSION

It was concluded that there was a significant difference in the attitude of secondary school teachers towards Technology Assisted Learning Programme in terms of age, marital status and teaching experience. There is a need for teachers to improve their skills through frequent use, and practice, in order for them to successfully use any technology in teaching. The younger teachers had favourable attitude towards TALP than older teachers. To develop a positive attitude towards technology-assisted learning programs among older teachers, it is important to provide more training and support to help them become comfortable and confident with the technology. This can include hands-on workshops, one-on-one coaching, and access to resources and tutorials. The unmarried teachers had favourable attitude when compared to their counterpart. Unmarried teachers may embrace technology as a valuable tool and learning and involving teachers in the implementation and evaluation process can help them see the value of technology-assisted learning and become advocates for its use. The more experienced teachers shows favourable attitude when compared with less experienced teachers. Some less experienced teachers may be eager to adopt new technologies and see them as a valuable tool for enhancing student engagement and learning. It's also important to highlight the benefits of technology-assisted learning, such as its ability to engage students, support personalized learning, and increase access to educational resources. By demonstrating the value and benefits of technology in the classroom, less experienced teachers may become more open to incorporating it into their teaching practice.

REFERENCES

[1] Abouserie, R. and Moss, D. 1992. Cognitive style, gender, attitude toward computer assisted learning. Educational Studies 18(2): 151-161.

[2] Gardner, D.G., Dukes, R.L. and Discenza, R. 1993. Computer use, self-confidence and attitudes: A causal analysis. Computers in Human Behavior 9(3): 427-440.

[3] Garrette, Henry E. (1966), Statistics in Psychology and Education, Bombay: Vakils Fifer and Private Ltd.

[4] Guliford J.P. (1978), Fundamental Statistics in Psychology and Education, Singapore: Mc Graw Hill International Edition.

[5] Kalanda, K. 2005. Factors influencing college students' attitude towards technology. Unpublished master's dissertation, University of South Africa. Retrieved from http://uir. unisa.ac.za/bitstream /handle/10500 /1531/ dissertation. pdf?sequence=1

[6] Koul, Lokesh (1984). Methodology of Educational Research, Vikas Publishing House Private Ltd.